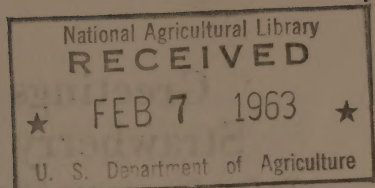


62

Fr

Lewis Farm



FIRST in STRAWBERRY PLANTS

and ASPARAGUS ROOTS

Our 31st Year

1963

CATALOGUE

SPRING *and* FALL

*

VARIETY DESCRIPTION

CULTURAL DIRECTIONS

PRICE LIST

Purchase Information Page 15

Travel Directions and Index on Back Cover

ROGER H. LEWIS

28 Laurel Lane, Andover, Massachusetts

Telephone 682-0318

Area Code 617



Greetings from the Lewis Farm Strawberry and Asparagus Nursery

TO OUR FRIENDS AND CUSTOMERS:

We wish to extend greetings to old customers and new. We thank you for your past patronage and look forward to serving you again. Visitors to our farm are always welcome. Inquiries for additional information will be answered to the best of our ability. We endeavor to make this catalog an aid to growers of strawberries and asparagus.

This year we offer plants of twenty varieties of strawberries originating from virus-free stock, field grown on fumigated soil, field dusted, sprayed, irrigated, then winter mulched for a wonderful crop of clean, strong-rooted plants. We also have listed some fine asparagus roots from best strain available.

We are continuing to operate screens for maintaining a nucleus of screen-protected virus-free stock of the various varieties.

Rotation of our nursery land, organic build-up of soil, soil fumigation before setting strawberries, mechanical digging of plants to preserve the root systems, and promptness in shipping will continue to be our practice in order to give you the best plants possible.

Strawberry Varieties

Our selection of varieties includes those varieties that have proved adaptable to the Northeast and are desirable in quality; also the newer varieties worthy of trial for their desirability and adaptability.

We are offering the following new varieties: N.J. 157 Vesper; U.S.D.A. Midway; N.Y. Fletcher, Frontenac, Fulton and Geneva Everbearing; and Washington State Puget Beauty. Vesper newly named this year has been tested extensively in the northeast under the number N.J. 157 with excellent results. We feel Vesper is a must for substantial trial with commercial growers. Frontenac and Fletcher have performed especially well so far. We like Midway as a fine quality large early to second early prolific variety with built-in disease resistance. In the spring of 1964 we will have available a new virus free stock of Ozark Beauty Everbearing originating from indexed stock.

We use all precautions to have all of our stock true to name. If any do prove otherwise, we will replace this stock, if available, but in no case will we be responsible for any sum greater than that originally paid for the plants.

Standard June Varieties

VARIETIES FOLLOW IN ORDER OF
VOLUME OF SALES IN 1962

*Indicates Varieties Originating from Virus-Free Stock

*CATSKILL

Catskill has been and still is a leader in the Northeast. It grows a

vigorous plant, is a prolific bearer of large midseason to late berries of excellent flavor with a very attractive red color and bright green cap. The Catskill berry is attractive, which along with its great yielding ability makes it a most desirable strawberry. The berries hold their size through the season better than most varieties we have ever had. It is considered a good freezing berry.

***SPARKLE**

Sparkle is an attractive bright dark-red, fine flavored, high quality berry. Its productivity along with its other good qualities have made it one of the top four. It fruits over a longer period and lasts longer than any other variety if given fertility and moisture. Sparkle, like Catskill, does best on a medium to heavy soil. Under poor conditions Sparkle has a tendency to lose size after the first few pickings. It is rated a good freezer, an excellent market berry, and certainly is one of the leading all-around strawberries today and is more adaptable to a wide range of soil and climate than most other varieties.

***JERSEYBELLE (New Jersey 7A)**

We saw the berries from this variety sold on the auction block in New Jersey for the highest price of all varieties including Sparkle, due in part to their enormous size and marvelous appearance, and they are even larger than Robinson. We recommend them for trial to all commercial growers who have good soil and a good fresh market. Jerseybelle so far is rated a fair runner maker and a good to heavy yielder. It ripens a little later than Sparkle. After 2 years we are of the opinion that Jerseybelle quality improves the further north it is grown from New Jersey.

Jerseybelle in 1962 season with us outyielded all other varieties and responded to irrigation during the dry season better than all other varieties. Like Catskill and Earldawn, Jerseybelle is said to lack resistance to verticillium wilt and red stele.

***MIDLAND**

The Midland is outstanding as an early berry and is one of the best early berries we ever had. The superb shape, red flesh, tart flavor, good yield and good shipping qualities make this a wonderful berry. Although it is not a heavy runner maker, the virus-free stock makes a good runner growth and has shown good vigor.

***ROBINSON (Scarlet Beauty) — Origin, Michigan Station**

The Robinson produces a large to very large bright glossy light red berry of very attractive appearance. Under good conditions berries hold their size well and this variety is a very heavy yielder. The flavor and quality is better than Howard-17, probably not as good as Sparkle and Catskill. Growers with road-side stands and the lighter soils favor the Robinson for the heavy yields possible under good management.

Under the drawbacks, the Robinson makes too many runners; some years leaf spot becomes serious; the berry although attractive in appearance is quite soft and does not ship well.

***EARLIDAWN**

A new variety just released by the U.S.D.A. which is a cross of Midland and Tennessee Shipper. Tested for several years it has behaved well and yielded a good crop of very early berries. On an early location it will be from four to six days earlier than Howard-17 and produces a big percentage of its crop the first seven or eight days. The fruit is quite firm with a tough skin. Color is a vivid light red which persists well as a light red on holding. The berries are fairly uniform in shape with a tart good flavor and in freezing tests have rated high for color texture and flavor. Earlidawn makes a large plant but is not a heavy runner producer. One of best early varieties. Susceptible to verticillium wilt.

***FAIRFAX**

Fairfax was introduced by the U.S.D.A. in the early thirties and still leads the field for its unusually fine-flavored, sweet, firm, good quality berries, and is especially liked by home gardeners. The berry is a very dark red and a comparatively low yielder, which accounts for its not being a commercial berry. The size and yield of our stock was good, which checks with some growers who retail and who get a premium for this excellent berry.

***SURE CROP**

Another new introduction by the U.S.D.A. A cross between Fairland and Maryland U. S. 1972. Sure Crop is a mid-season berry averaging large size berries and maintaining size throughout the season. Berries are a bright red color, but do not darken too much. The fruit is firm with tough glossy skin, irregular wedge-shaped first berries, later uniform short conic berries of good size with tart good flavor, rated as satisfactory for freezing. Sure Crop is rated as a very vigorous grower, and like Stelemaster is resistant to three strains of red stele. It has good frost resistance; hence, its name Sure Crop.

***HOWARD-17 (Premier)**

Howard-17 is one of the oldest self-pollenizing strawberries. For the New England states and other northern areas, it is probably the earliest, nearly frost-proof berry. Its picking season starts a week to ten days earlier than most varieties. In some seasons and some locations berries are small and soft.

***ORLAND (Maine No. 127)**

Orland is a heavy yielder of good berries that are an attractive red, about the same quality and firmness as Howard-17, but holds size better. The plant is vigorous, has good fruit stems, produces many short, stocky runners, and is resistant to red stele disease. Parentage: Aberdeen x Howard-17. Orland is same season as Catskill.

***MIDWAY — Origin (Dixieland x Temple)**

This newly named variety is a late introduction from the U.S.D.A. and the Maryland Experiment Station. The plants are vigorous and productive with dark green foliage. Midway is resistant to the common race of red stele, but has showed some susceptibility to mildew. The fruit is deep red, glossy, firm and fair quality; above medium in size. Since Midway is firm and a good shipper, we recommend it for trial.

***REDGLOW**

This American Beauty is a cross of Fairland and Tennessee Shipper. It has been tested for several years by the U.S.D.A. Redglow ripens second early, berries are large and maintain size well throughout season. The berries are a vivid deep red, as firm as Sparkle, uniform in shape, sub acid, good flavor, good freezers, wedge shaped to short blunt and conic, and as attractive as Empire. Redglow has proved moderately productive, produces runners freely and is resistant to common forms of red stele.

***ARMORE**

Developed by the Missouri Station. Armore is midseason to late and a very heavy yielder of large blocky berries that stand up well. Its fine flavor and large size make it very popular with "pick your own customers." In comparison with Sparkle, Catskill, and Robinson it lacks good market appearance. Some seasons and in some locations the foliage seems to be susceptible to leaf spot and mildew. The use of fungicides can correct this.

MERRIMACK F-13

The Merrimack berries are firm, bright red with a tough skin, some being wedge-shaped. The fruit is very large and fine flavored. This is a late variety and the first fruit is picked about two weeks after Howard-17. A moderate runner maker and moderate producer with large strong plants.

VESPER (New Jersey 157)

Vesper is the result of a cross between Utah Shipper and Jerseybelle. Four years of single plot observations and three years of replicated testing have demonstrated that the fruit of Vesper is very large and maintains its size well during the harvest season. It ripens very late, somewhere between Jerseybelle and Red Star and has been the most productive of all the selections or varieties during the time it has been in replicated plots. The primary fruits are somewhat furrowed but later fruits are smooth. It is a rich red color with a nice gloss if harvested at the proper maturity. The calyx is large and showy and the seeds are raised and attractive. Quality of fruit is better than Jerseybelle, but not as good as Sparkle. It is commercially firm in all areas where Jerseybelle has done well and appears adapted to that area where Jerseybelle is successful. The plants are of medium size and very prolific runner

makers. The plant is susceptible to red stele and verticillium wilt and should not be planted in soils contaminated with these disease organisms. (*Description from N. J. Agricultural Exp. Station*)

***FRONTENANC — Origin (Erie x Fairfax and Dresden)
New York Experiment Station, Geneva, New York**

The plants are very large and vigorous. The berries are large to very large conic, a medium dark red and good flavor. Frontenanc is latest of the three N. Y. varieties appears to be a good producer. Not quite as firm as Fulton or Fletcher, but attractive in appearance and certainly worth further trial. So far Frontenanc appears to be the most popular.

***FLETCHER — Origin (Midland x Suwanee) New York
Experiment Station, Geneva, New York**

The plants are moderate in vigor, runner production and yield. The fruit is attractive, good quality, firm with glossy appearance, the sweetest of the N. Y. varieties and also the earliest. This berry is certainly worthy of a trial.

***FULTON — Origin (Starbright x Pathfinder) New York
Experiment Station, Geneva, New York**

Fulton is very vigorous, a good runner producer. Berries ripen mid-season, attractive color and gloss, only good to fair flavor, firm and yield well. Size holds up well. Also worthy of a trial.

***RED STAR**

The Red Star is a late fruiting, high quality fine flavored strawberry with prominent seeds and a light crop of fruit. One of its drawbacks is that it is a shy runner maker.

PUGET BEAUTY

A new variety from the State of Washington. Plants show great vigor. This variety may be promising and we recommend it only on a trial basis until it is tested for adaptability.

Everbearing Strawberry Plants

OZARK BEAUTY Everbearing

The Ozark Beauty is a vigorous new variety producing quantities of large elongated berries, deep red with prominent seeds. Berries are very sweet and tasty. Plants are large and runner freely so that you must space the plants to get best results in fruiting. We have yet to see any Everbearer including Red Rich that is as good.

GENEVA Everbearing (New York 547)

A new vigorous Everbearing strawberry which sets fruit heavily. Fruit size and color good. Fruit is not as sweet as Ozark but good flavored. Description based on one year's trial.

Asparagus Roots

We have a good supply of large, well-developed, one year roots from the newest selection of Mary Washington rust-resistant asparagus adapted to the northeast.

THESE ROOTS WILL ALL BE SPRING DUG, CAREFULLY STORED, HANDLED AND GRADED FOR YOUR SATISFACTION.

Write to us for prices on large orders of these fine roots.

ASPARAGUS CULTURE

Set asparagus roots in trenches plow depth, or 6 to 8 inches below normal ground level, 18 inches apart in rows 3 to 4 feet or more apart. Lay roots out flat along bottom of trench and cover roots and crowns with one or two inches of soil. As stalks grow out of crowns and show strength, gradually fill in trench (which will help to take care of the weed problem the first year) without smothering the young crowns. By August the bed should be level.

Best time for setting roots is April 10th to May 10th.

Soil should be a medium-to-light, well drained, fertile soil, well prepared, with witch grass eliminated.

Watch new growth for slugs and beetles. Dust or spray with D.D.T., Rotenone or Calcium Arsenate as pests appear, usually in very hot weather.

Wait two years at least before start of cutting and then cut for only half of cutting season first year. Normal season is May 1st through July 1st.

Manure may be applied in late fall or early spring and harrowed in. Broadcast fertilizer each year after cutting season is over to grow vigorous ferns, which along with warm weather, regulate the size of crop the following year. If weather is very dry after cutting season or during midsummer growing season of planting, be sure and irrigate adequately 2 or 3 times.

After plantation is well established, weed control can be had by using new chemical C.M.U. Cyanimid properly timed is also an effective control during and after cutting season.

WALTHAM WASHINGTON

Newest of all Mary Washington selections, very productive with wonderful quality and good rust resistance. Large spears with buds remaining tight until spears of smooth, dark green color grow quite tall. Some purplish tinge characteristic of Washington asparagus is visible. This excellent strain is the result of twenty-five years of patient selection and testing at the Waltham Experiment Station, Waltham, Mass., by Professor Robert E. Young. We especially recommend this variety of asparagus.

PRICE LIST FOR SPRING AND FALL 1963

STRAWBERRY PLANTS

Early Varieties

	1-20	25	50	100	150	200	250	300	400	500	750	1000	3000	5000
*Earlidawn	10¢ each	1.75	2.75	4.50	6.75	8.00	9.75	10.50	13.00	15.00	22.50	27.00	79.50	130.00
*Midland	10¢ each	1.75	2.75	4.50	6.75	8.00	9.75	10.50	13.00	15.00	22.50	27.00	79.50	130.00
*Midway	10¢ each	1.75	2.75	4.50	6.75	8.00	9.75	10.50	13.00	15.00	22.50	27.00	—	—
*Fairfax	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	—
*Howard 17	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	120.00

Midseason Varieties

*Catskill	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	120.00
*Robinson	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	120.00
*Surecrop	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	120.00
*Orland	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	—	—
*Red Glow	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	—	—
*Armored	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	—	—
*Fletcher	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	—	—
*Fulton	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	—
*Puget Beauty	10¢ each	1.85	3.10	5.00	7.00	8.75	—	—	—	—	—	—	73.50	—

Late Varieties

*Sparkle	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	73.50	120.00
*Jerseybelle	10¢ each	1.75	2.75	4.50	6.75	8.00	9.75	10.50	13.00	15.00	22.50	27.00	79.50	130.00
*Vesper	12¢ each	2.25	3.75	6.00	8.25	10.50	12.50	13.50	16.20	18.75	24.75	30.00	87.00	—
*Frontenac	10¢ each	1.75	2.75	4.50	6.75	8.00	9.75	10.50	13.00	15.00	22.50	27.00	79.50	—
*Merrimack	10¢ each	1.75	2.75	5.00	—	—	—	—	—	—	—	—	—	—
*Red Star	8¢ each	1.50	2.50	3.85	5.80	7.00	8.75	9.30	12.00	13.50	20.25	25.00	—	—

Everbearing Varieties

Ozark Beauty	12¢ each	2.60	4.35	7.00	9.75	12.25	14.00	15.75	18.90	21.85	28.85	35.00	—	—
*Geneva	12¢ each	2.60	4.35	7.00	9.75	12.25	14.00	15.75	18.90	21.85	28.85	35.00	—	—

*Indicates varieties from virus-free stock.

ASPARAGUS ROOTS

Waltham Washington	13¢ each	2.50	4.00	6.50	8.75	**10.00	12.00	13.50	16.00	15.00	—	27.00	—	—
--------------------	----------	------	------	------	------	---------	-------	-------	-------	-------	---	-------	---	---

**Orders of 200 or more Asparagus Roots shipped F.O.B., Lawrence, Mass.

SHIPMENT AND PRICE INFORMATION (WE DO NOT SHIP PLANTS AFTER JUNE 1)

Price list is shipment prepaid on all parcel post orders up to and including the Fourth Zone.

Add 10% for parcel post beyond Fourth Zone (600 miles and over).

Deduct 5% for all Express orders. Orders over Fourth Zone sent express, F.O.B., Lawrence, Mass., which is the best method for larger orders.

Please figure varieties separately as listed on price list.

Prices quoted on request for larger orders of Strawberry Plants and Asparagus Roots.

FALL SHIPMENT OF STRAWBERRY PLANTS

Add 20% on fall shipment of strawberry plants, which is from September 1 to October 15.

Do not group varieties together at price of one variety. Figure separately as listed in price list.

Request special prices and shipping arrangements for larger orders than listed.

NO ORDERS SHIPPED C.O.D.

Additional purchase information on page 15.

Roger H. Lewis, 28 Laurel Lane, Andover, Massachusetts • Telephone 682-0318

Cultural Suggestions and Observations on Strawberries

SOILS

Strawberries succeed on a variety of soils, with the best success had by avoiding the extremes of too dry and sandy soil or too heavy and wet soil. We have soils in New England capable of outstanding yields, Charlton, Paxton, Woodbridge, Coloma, Gloucester fine sandy loams. Merrimack fine sandy loams and others are desirable.

SOIL PREPARATION

Soil preparation should be as thorough as for vegetables, with care taken to avoid too much travel with a tractor over the ground after the final plowing. Fall plowing followed by spring plowing is good with a thorough harrowing job just before the final plowing. Spring plowing should be followed by a careful leveling operation, thus aiding greatly in proper plant setting. Where there is *no* natural drainage as on gentle slope, plants should be set on raised beds.

SOIL FERTILITY

Other things being equal and well done, yields of strawberries are dependent on the amount of organic material available in the soil for decaying during the growing and fruiting period. Organic or humus content depends upon the amount of cover crops, manure or other material plowed under or worked into the soil prior to setting the plants. Cow manure is ideal, either applied the same year or the year previous to setting plants. The use of too much poultry manure just previous to setting strawberries produces too rank a foliage and tends to soften berries. Poultry manure applied to a sod or cover crop just prior to plowing is good practice. Feeding the growing cover crop with manure or fertilizer is sound practice, unless the land is very fertile. Applying super-phosphate or balanced fertilizer with manure as cover crop is worked in is desirable.

Once plants are set and well established, a light side dressing of balanced fertilizer is beneficial.

SOIL MANAGEMENT

Strawberries like new land or land that has been in sod a year or two previous to setting strawberries. However, many good crops of strawberries are grown every year on old ground which has been under cultivation for many years. It is a good plan to rotate your plantings of strawberries, especially if the location is poorly drained. We also advise to avoid setting strawberries on land where potatoes, raspberries, tomatoes, or peppers have been planted the previous year. Land that is fallowed or planted to corn, beans, squash or cover crops the previous year is good management. Work in your cover crop as much in advance

as possible before setting strawberries, especially if you have a rank cover crop. Where the cover crop is not too heavy, it can be worked in just before you set the plants if you apply a moderate amount of poultry manure or fertilizer, or a combination of the two, thoroughly disked down with the cover crop before plowing.

Recent experiments have definitely shown that applying organic materials such as peat, sawdust and cover crops, along with manure and fertilizer, gives the best yields. Manure and fertilizer rate second in results and fertilizer alone gives the lowest yield and poorest runner production.

Much labor in caring for the bed can be saved by controlling weeds and eradicating witch grass for a year or two previous to setting the strawberry plants. Good and thorough preparation of the soil is important in either mechanical or chemical weed control. Progress has been made in the use of chemical weed control with Crag Herbicide Sesan and other materials.

Our experience and observation indicates that success with chemical weed control depends on several factors and anyone using chemicals should get in touch with their local Extension Service for the latest recommendations. For instance, soil moisture or lumpy condition of soil will affect the results of the Crag Herbicide. Where chickweed is a problem, as it is with many growers, a late fall or (and) a very early spring application of Chloro I.P.C. during the dormant period will do an excellent job of control. Here again contact your Extension Service for details. **As yet there is no All-out weed Control for Strawberries.**

Regarding Lime. It is commonly believed that no lime is ever needed on land used for strawberry growing. We believe that all crops on New England's acid soils benefit from use of some lime. The P.H. for strawberries should probably not be allowed to get higher than 5.5 or 6.0. We feel a very low P.H. reading calls for some lime and the strawberry crop will benefit.

It is good sound practice on any land, particularly new ground, to apply 25 lbs. of chlordane to the acre, either dusted on and harrowed in, or used in a fertilizer mixture. This practice is not expensive and will eliminate grubs, wire worms, and reduce cut worm injury, which will in many cases pay for itself several times over.

MANAGEMENT OF GROWING PLANTS

It is extremely important to set plants as early as ground can be properly prepared in the spring. The availability of irrigation may offset the disadvantage of late planting somewhat.

Plants may be set 18 inches apart, in rows 4 feet apart. Strawberries are grown successfully with many variations of this spacing. Any system should (1) be uniform throughout field for ease of cultivation, (2) prevent the rows from meeting in the middle, which makes picking difficult, and (3) prevent runner plants from setting too thickly, thus robbing each other of plant food, moisture and air, which results in smaller berries and lower yield.

Handling of runners varies with the variety, the soil, the distance between rows, etc. Keep in mind that the first runner plants produce the most fruit and that several research projects have shown that a medium to narrow matted row, not allowed to mat too thick, have outproduced any other system.

Control of late runners may be had by running two rolling disc colters down the edges of the rows and following with a rototiller late in the fall, thus disposing of the surplus fall runners and providing adequate space for aeration and convenience in picking.

Always set plants with roots straight down. Be sure planter shoes or hand tool penetrates deep enough to facilitate proper planting. **Care should be taken that plants are set with crowns level with top of the ground** and not too deep, or worse still, too shallow. Also, through the growing season avoid covering either old or new crowns with a clod of dirt while hoeing, weeding or cultivating. **Failure to observe these simple precautions** probably accounts for 90 percent of the strawberry plant failures. (See cut on page 15).

To get the healthiest, most vigorous and prolific bed, the blossoms the first year should be pinched off by hand as they appear in the spring.

Hand weed control is extremely important. "A stitch in time saves nine" cannot be overemphasized.

Mulching is not absolutely necessary, but very desirable. We have noted severe winter killing about once every four or five years where the grower never mulches. A mulch prevents freezing and thawing at intervals in late fall, winter and early spring. It keeps the fruit clean in wet weather, provides a degree of comfort for pickers and conserves moisture. It also checks weeds and, if plowed under with the old beds, adds to the humus content of the soil. Holding the mulch on as long as possible in the spring will tend to delay blossoming and sometimes enables the grower to escape a frost damage or partial frost damage to blossoms. With some materials it is not necessary to remove mulch from over plant row. Other materials require the removal of considerable amount. Any loose, weed free material is practical, such as meadow hay, salt hay, pine needles, oat or rye straw that has been thrashed, wood shavings or horse manure with a mixture of straw and shavings. Avoid materials which have a tendency to matt down tightly and smother the plants, such as decayed manure or wet leaves. A good rule is to apply mulch just thick enough to cover plants so that only occasionally do you see a few leaves. Some evidence now indicates that early mulching before any severe freezing gives the best results.

Irrigation, like mulching, is not absolutely necessary in growing good strawberries. However, several past seasons have demonstrated the value of a good portable system. Another point in its favor is the possible use of irrigation to ward off frost damage to blossoms prior to fruiting season. This practice, which amounts to crop insurance, is in general use by many growers. Irrigation should start before temperature gets to freezing and continue until temperature rises above freezing. On a frosty night irrigation will coat the entire planting with ice but experience has shown that fruit buds will not be damaged whereas dry foliage

and frost may kill some of the buds and reduce the crop. Recent research indicates that ample moisture supplied by irrigation, if necessary during the month of September, when most of the fruit buds are formed in the crowns, can increase the total quantity, as well as quality, of the crop the following spring.

Disease and Pest Problems of Strawberries

We list the following diseases and pest problems of strawberries: nematode injury and black root rot; strawberry virus, cyclamen mite infestation; red stele root disease; verticilium wilt and control of leaf spot and berry rot.

If you have a serious nematode or blackroot rot problem, you should consider fumigation of soil. We practice a four-year rotation and fumigate our nursery land prior to setting strawberries. This fumigation destroys grubs, wire worms, and nematodes that injure the strawberry plant roots permitting the fungi to enter the roots which in turn creates black root rot. You can control black root rot too by rotating land. Avoid planting potatoes, peppers, and tomatoes ahead of strawberries in your rotation.

We originate our plant stock from screens that protect plants from the strawberry aphids which cause the virus by coming in from other areas after feeding on infected plants. We also dust and spray throughout the growing season both inside and outside of the greenhouse to eliminate the aphids, thus eliminating the virus. For your berry production it is not necessary or practical to control the aphids, but it is important to start with substantially virus-free plants.

Red Stele has become serious in some areas. It can be avoided by using clean plants on soil that has no history of red stele infection. Some authorities claim red stele can be ignored on infected soil by using resistant varieties. The new variety of Sure Crop has resistance to three strains of red stele. Sparkle, Red Glow, and Vermilion have resistance to the most common forms of red stele. Note that red stele almost always occurs on poorly drained locations.

Verticilium wilt is a soil borne disease which has only recently appeared in strawberry plantings in a few places in New England. A typical experience is that after new runners have been established the mother plant succumbs to wilt. Do not plant strawberries where infected plants, indicating soil infection, of any species have been growing.

WARNING! Never have a strawberry planting follow on land where you have grown tomatoes, potatoes, peppers, egg plant or raspberries. Avoid use of land for strawberries where verticilium wilt has been a problem with a vegetable crop the previous year. If you have had verticilium wilt on the place, do not use strawberry varieties susceptible to verticilium wilt.

CONTROL OF BERRY ROT IN STRAWBERRIES

We believe the time has come for all strawberry growers to give serious consideration to spraying or dusting for control of fruit rots now that better materials are available.

In the fall after growth has stopped and before mulching use Puratized Agricultural Spray (Phenyl Mercury), one pint to 100 gallons water, 200 to 300 gals. per acre. If mulch is removed before growth starts in spring and the new bed was not sprayed with Phenyl Mercury the previous fall, use as you would in the fall. Do not use in the spring if growth has started as the spray will cause injury.

If Phenyl Mercury is not to be used in the manner indicated above, you should use Phygon during the growing season in August and September on the new bed as directed on label.

Whether or not you have used Phygon or Phenyl Mercury as directed above, you should use Thiram at the rate of two pounds per acre in the spring on the bearing bed when new leaves are expanded and blossom buds are visible. Repeat in pre-bloom and when first berries are one-third grown. If rainy conditions are indicated during harvest season, use Captan spray or dust at two pound rate per acre as needed through season. Actual grower experience shows that this program reduces berry rot from 50% to nearly 100%. This program increases the shelf life of berries, makes the marketing and handling more satisfactory, and justifies the expense several times over.

If spittle bugs or tarnish plant bugs which cause misshapen and nubbin berries are a problem, spray with 50% D.D.T. as late as possible in the spring before the bloom starts.

FALL SETTING OF STRAWBERRY PLANTS

Each year we are selling more plants in the fall and are frequently asked about this practice. A fall set bed does away with the necessity of setting in the spring. If fall set plants are set in several rows a foot apart each way, they can be fruited the following June to some advantage. Fall setting will sometimes allow establishment of a bed on heavy or wet soil that usually cannot be worked early in the spring, especially a wet spring.

There are some disadvantages to setting plants in the fall. These plants must be mulched individually the first winter with sawdust or shavings because plants set in freshly worked soil are more likely to heave or wash out in heavy rains. You must make sure the mulch stays on all winter. Do not remove the mulch too early in the spring. If the land is weedy and the following spring is wet, weed control is sometimes difficult. Fall set plants cost a little more. Although fall set plants throw runners sooner, spring set plants of vigorous stocks will supply ample runners. The majority of growers still seem to prefer spring setting.

Purchase Information

Orders reserved for future delivery on receipt of one-fourth purchase price, the balance to be received on notice of shipping date. After APRIL FIRST send check, money order or cash for immediate delivery. NO ORDERS SHIPPED C.O.D. When you take delivery at farm, a cost of shipping discount is allowed.

Parcel post is usually the fastest and most satisfactory for small shipments through the fourth zone. ADD 10% FOR PARCEL POST BEYOND THE FOURTH ZONE. Deduct 5% for all express orders to be sent F.O.B., Lawrence, Mass. All prices quoted shipment prepaid except on orders of 200 or more asparagus roots which are shipped F.O.B., Lawrence, Mass.

Do not group varieties together at price of one variety, but figure separately as listed in price list.

Request special prices and shipping arrangements for larger orders than listed.

All strawberry plants are freshly dug just prior to time of shipping and packed to arrive in best possible condition. All asparagus roots are dug at the earliest possible date in March or early April, then stored and shipped to arrive in good firm condition.

Spring shipping dates: April 1 to May 30. Fall shipping dates: September 1 to October 15. Add 20% to list for fall plants.

We take all precautions to have our stock true to name and to arrive in good condition. If you have any claim, please notify us within ten days and if stock is available, we will replace same or refund your money. We cannot give any further guarantee beyond the purchase price due to the many factors beyond our control after the plants are shipped.

All plants shipped after May 25 will be packed and shipped in best possible condition but at purchaser's risk.

For SPECIAL HANDLING include 25c up to 2 lbs.; 35c from 2 lbs. to 10 lbs.; 50c from 10 lbs. and up.



Strawberry plants set at various depths; left-hand plant set too deep; middle one too shallow; right hand just right.

How to Get to the Lewis Farm

From Andover and Lawrence:

Turn west from Route 28 in South Lawrence at Andover Street. Go three (3) miles, Overpass new highway and take first right at sign.

From Lowell:

Turn left off Andover Street, Route 133, at Tewksbury-Lowell line, onto River Road. Drive four (4) miles to our sign at Laurel Lane.

From U. S. 93:

Take South Lawrence River Road Exit and go west $\frac{1}{4}$ mile to our sign.

Index

Greetings	2
Strawberry Variety Descriptions	2, 3, 4, 5, 6
Asparagus Description and Culture	6, 7
Price List	8, 9
Culture of Strawberries	10, 11, 12, 13
Disease and Pest Problems	13, 14
Fall Setting of Strawberries	14
Purchase Information	15
Directions to Lewis Farm	16

CERTIFICATE OF NURSERY INSPECTION

The Commonwealth of Massachusetts

DEPARTMENT OF AGRICULTURE

Division of Plant Pest Control and Fairs

OFFICIAL CERTIFICATE No. 402

BOSTON, September 4, 1962

To Whom it may concern

This is to certify that in accordance with Sec. 17, Chap. 128, G. L. Mass. Tercentenary edition, as amended, the strawberry nursery stock of **LEWIS FARM** grown at Andover, Massachusetts, has been inspected and found to be apparently free from all injurious insects and plant diseases which might be disseminated on such stock.

This certificate good until July 1, 1963.

Inspected by W. P. SHEPARD

(Signed) P. C. KUZMISKI

Assistant Director of Plant Pest Control